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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/836,125	04/16/2001	David Bautista-Lloyd	SUNO4-20(P5753)	5808

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EXAMINER	
PEREZ DAPLE, AARON C	

ART UNIT	PAPER NUMBER
2154	

DATE MAILED: 07/16/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/836,125	BAUTISTA-LLOYD ET AL.	
	Examiner	Art Unit	
	Aaron C Perez-Daple	2154	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *28 August 2001*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-41* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-41* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *9/13/02, 9/12/03*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. This Action is in response to Application filed 4/10/01 and preliminary Amendment filed 4/3/02, which have been fully considered.

2. Claims 1-41 are presented for examination.

3. This Action is non-Final.

Claim Objections

4. Claim 18 is objected to because of the following informalities: line 1 recites "system method" where it should recite --system--. Appropriate correction is required.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

6. **Claims 11, 19, 26 and 38** are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Specifically, new claims 11, 19 and 38 recite the steps of updating the queue for an instance of the component type other than the requested instance of the component type and of unregistering the client session. These steps have not been enabled by the application as originally filed.

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. **Claims 5 and 32** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Specifically, line 3 recites "each update queue" There is insufficient antecedent basis for this limitation in the claim. Claim 4, from which claim 5 depends, explicitly recites "one update queue." Therefore, the Examiner interprets that "each update queue" should recite --the update queue --. Claim 32 depends from claim 31 in an analogous manner, and therefore the same arguments apply.

9. **Claims 8 and 35** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Specifically, claim 8 depends from claim 4, which recites "one update queue" and "at least one region." Therefore, claim 8 recites "the regions" where it should recite -- the at least one region --. Claim 8 further recites "update queues" where it should recite -- update queue --. Claim 35 depends from claim 31 in an analogous manner, and therefore the same arguments apply.

Claim Rejections - 35 USC § 102

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the

applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

11. **Claims 1-6, 8, 16, 23, 30-33 and 35** are rejected under 35 U.S.C. 102(e) as being anticipated by Tsutsumitake (US 6,480,883 B1) (hereinafter Tsutsumitake).

As for claim 1, Tsutsumitake discloses a method for providing data updates to a page, wherein the page includes multiple regions of dynamic content, wherein the regions of the page are displayed within a presentation program executing on a client, wherein a server transfers the page to the client over a network, and wherein the server performs:

detecting state changes (col. 8, line 24 – col. 9, line 5, "Fig. 1 shows...transmission unit 106.");

queuing information on state changes (queuing is considered inherent since the state changes must at least be stored in temporary memory at the server prior to transmission on the network; col. 9, lines 23-28, "The event transmission...respective clients 11.");

generating an update package including content indicating the detected state changes (col. 8, lines 57-65, "An event generating unit...time has arrived."; col. 10, lines 7-15, "The event receiving unit...on the display...."); and

sending the update package to the client, wherein the presentation program in the client renders the content in the update package in at least one region (col. 8, lines 50-56, "An event request...to the client 11."; col. 10, lines 7-15, "The event receiving unit...on the display....").

12. As for claim 16, Tsutsumitake discloses a system for providing data updates to a page, wherein the regions and the page are displayed within a presentation program executing on a client, comprising:

a processing unit (information processing server 10, Fig. 1);

a network connection enabling the processing unit to transfer the page to the client over the network (network 12, Fig. 1);

a memory device (inherent to information processing server 10, Fig. 1; col. 19, lines 8-34, "The function element...requiring such information."); and

a computer readable medium including code executed by the processing unit to perform:

(i) detecting state changes (col. 8, line 24 – col. 9, line 5, "Fig. 1 shows...transmission unit 106.");

(ii) queuing information on the state changes (queuing is considered inherent since the state changes must at least be stored in temporary memory at the server prior to transmission on the network; col. 9, lines 23-28, "The event transmission...respective clients 11.");

(iii) generating an update package including content indicating the detected state changes (col. 8, lines 57-65, "An event generating unit...time has arrived."; col. 10, lines 7-15, "The event receiving unit...on the display....");

(iv) sending the update package to the client, wherein the presentation program in the client renders the content in the update package in at least one region (col. 8, lines 50-56, "An event request...to the client 11."; col. 10, lines 7-15, "The event receiving unit...on the display....").

13. As for claims 23 and 30, Tsutsumitake discloses a system and an article of manufacture for providing updates to a page, wherein the page includes multiple regions of dynamic content, wherein the regions and the page are displayed within a presentation program executing on a client; wherein a server transfers the page to the client over a network, comprising:

means for detecting state changes (col. 8, line 24 – col. 9, line 5, "Fig. 1 shows…transmission unit 106.");

means for queuing information on state changes (queuing is considered inherent since the state changes must at least be stored in temporary memory at the server prior to transmission on the network; col. 9, lines 23-28, "The event transmission…respective clients 11.");

means for generating an update package including content indicating the detected state changes (col. 8, lines 57-65, "An event generating unit…time has arrived."; col. 10, lines 7-15, "The event receiving unit…on the display…."); and

means for sending the update package to the client, wherein the presentation program in the client renders the content in the update package in at least one region (col. 8, lines 50-56, "An event request…to the client 11."; col. 10, lines 7-15, "The event receiving unit…on the display….").

14. As for claim 2, Tsutsumitake discloses the method of claim 1, wherein the update package is generated and sent to the client computer in response to a request from the client computer (col. 10, lines 7-15, "The event receiving unit…on the display….").

15. As for claim 3, Tsutsumitake discloses the method of claim 1, wherein the presentation program comprises a web browser and wherein the request comprises a HyperText Transfer

Protocol (HTTP) request (col. 7, line 66 – col. 8, line 6, "In FIG. 1…(Microsoft Corporation.)").

16. As for claims 4 and 31, Tsutsumitake discloses the method and article of manufacture of claims 1 and 30, wherein queuing information on the state changes further comprises:

maintaining one update queue for at least one region of dynamic content that is capable of being displayed in the presentation program, wherein the update queue include state change information to be rendered in the at least one region associated with the update queue. (an update queue is considered inherent since the state changes must at least be stored in temporary memory at the server prior to transmission on the network; col. 10, lines 7-15, "The event receiving unit…on the display….").

17. As for claims 5 and 32, Tsutsumitake discloses the method and article of manufacture of claims 4 and 31, further comprising:

providing an event listener capable of detecting state changes, wherein one event listener is associated with each update queue (col. 8, line 57 -col. 9, line 5, "An event generating…transmission unit 106.");

detecting, with the event listener, a state change (col. 8, line 57 -col. 9, line 5, "An event generating…transmission unit 106."); and

adding, with the event listener, information on the state change to the update queue associated with the event listener (col. 8, line 57 -col. 9, line 5, "An event generating…transmission unit 106.").

18. As for claims 6 and 33, Tsutsumitake discloses the method and article of manufacture of claims 5 and 32, wherein one event listener and associated update queue provide state change

information for one instance of a component type, wherein the region associated with the update queue renders information in the client presentation program on the instance of the component type (col. 8, line 57-col. 9, line 5, "An event generating...transmission unit 106."; col. 10, lines 7-15, "The event receiving unit...on the display....").

19. As for claims 8 and 35, Tsutsumitake discloses the method and article of manufacture of claims 4 and 31, wherein the regions and the corresponding update queues provide state change information for one component type (col. 8, line 57 -col. 9, line 5, "An event generating...transmission unit 106.").

Claim Rejections - 35 USC § 103

20. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

21. **Claims 9-15, 17-22, 24-29 and 36-41** are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsutsumitake (US 6,480,883 B1) in view of Smith et al. (US 2002/0016839 A1) (hereinafter Smith).

22. As for claims 9, 17, 24, and 36, Tsutsumitake teaches receiving a client request for the page and generating a client session object for the client request (col. 11, lines 29-62, "if the request...is prevented."). Tsutsumitake further teaches generating an update queue (inherent) for the updating at least one region of dynamic content in a page (col. 10, lines 7-15, "The event receiving unit...on the display...."). Although obvious to one of ordinary skill in the

art, Tsutsumitake does not specifically disclose generating an update queue array for the client session object. Smith teaches generating an update queue array for a client session object in order to dynamically adjust transmission rates to the speed at which a client can receive and process data while ensuring that updated data received by the client is current (paragraphs 0014-0015, "The client manager...should be transmitted."; paragraph 0011, "Yet another object...client is current."). It would have been obvious to one of ordinary skill in the art to modify Tsutsumitake by generating an update queue array for a client session object in order to dynamically adjust transmission rates to the speed at which a client can receive and process data while ensuring that updated data received by the client is current, as taught by Smith above.

23. As for claims 10, 18, 25 and 37, Tsutsumitake teaches a method and system similar to claims 9, 17 and 24 further comprising:

receiving a client request for information on a requested component instance from one region of the page (col. 11, lines 29-42, "If the request...limited to this."); and

registering the client session with an event listener providing state change information for the requested component instance, wherein the event listener adds state change information to one update queue for the component type (col. 8, line 57 -col. 9, line 5, "An event generating...transmission unit 106."; col. 11, lines 29-62, "if the request...is prevented.").

Although obvious to one of ordinary skill in the art, Tsutsumitake does not specifically disclose the use of an update queue array for the registered client session. Smith teaches the use of an update queue array for the registered client session in order to dynamically adjust transmission rates to the speed at which a client can receive and process data while ensuring

that updated data received by the client is current (paragraphs 0014-0015, "The client manager...should be transmitted."; paragraph 0103, "Events transmitted...particular implementation."; paragraph 0011, "Yet another object...client is current."). It would have been obvious to one of ordinary skill in the art to modify Tsutsumitake by using an update queue array for the registered client session in order to dynamically adjust transmission rates to the speed at which a client can receive and process data while ensuring that updated data received by the client is current, as taught by Smith above.

24. As for claims 11, 19, 26 and 38, Tsutsumitake discloses a method similar to claims 10, 18 and 37 further comprising:

determining one event listener providing state change information to the update queue for an instance of the component type other than the requested instance of the component type (col. 8, line 57 -col. 9, line 5, "An event generating...transmission unit 106."; col. 11, lines 29-62, "if the request...is prevented."); and

submitting a request to the determined event listener to unregister the client session for the client submitting the client request (col. 8, line 57 -col. 9, line 5, "An event generating...transmission unit 106."; col. 11, lines 29-62, "if the request...is prevented.").

25. As for claims 12, 20, 27, 39, Tsutsumitake does not specifically disclose maintaining at least one queue for each client session object nor maintaining plural queues associated with plural client session objects. Smith teaches maintaining at least one queue for each client session object and maintaining plural queues associated with plural client session objects in order to dynamically adjust transmission rates to the speed at which a client can receive and process data while ensuring that updated data received by the client is current (paragraphs

0014-0015, "The client manager...should be transmitted."; paragraph 0103, "Events transmitted...particular implementation."; paragraph 0011, "Yet another object...client is current."). It would have been obvious to one of ordinary skill in the art to modify Tsutsumitake by maintaining at least one queue for each client session object or maintaining plural queues associated with plural client session objects in order to dynamically adjust transmission rates to the speed at which a client can receive and process data while ensuring that updated data received by the client is current, as taught by Smith above.

26. As for claims 13, 14, 15, 21, 22, 28, 29, 40 and 41 Tsutsumitake teaches receiving a refresh request from a client and returning to the requesting client state change information for the region indicated in the refresh request to render in the region of the page (col. 1, lines 44-59, "The user on...TV broadcasting."; col. 11, lines 29-62, "if the request...is prevented."). Tsutsumitake does not specifically disclose determining a plurality of queues for a plurality of determined client session objects. Smith teaches determining a plurality of queues for a plurality of determined client session objects in order to dynamically adjust transmission rates to the speed at which a client can receive and process data while ensuring that updated data received by the client is current (paragraphs 0014-0015, "The client manager...should be transmitted."; paragraph 0103, "Events transmitted...particular implementation."; paragraph 0011, "Yet another object...client is current."). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Tsutsumitake by determining a plurality of queues for a plurality of determined client session objects in order to dynamically adjust transmission rates to the speed at which a client can

receive and process data while ensuring that updated data received by the client is current, as taught by Smith above.

27. **Claims 7 and 34** are rejected under 35 U.S.C. 103(a) as being obvious over Tsutsumitake (US 6,480,883 B1) in view of Bayeh et al. (US 6,633,914 B1) (hereinafter Bayeh). As for claims 7 and 34, Tsutsumitake discloses monitoring the component types and instantiating one event listener for each instance of the component type (col. 8, line 57-col. 9, line 5, "An event generating...transmission unit 106."). Tsutsumitake does not specifically disclose using a servlet to perform these functions. Bayeh teaches using a servlet to perform these functions in order to monitor and respond to client requests (col. 4, line 49 - col. 5, line 27, "Servlets are...the requesting client."). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Tsutsumitake by using a servlet for monitoring the component types and instantiating one event listener for each instance of the component type in order to monitor and respond to client requests, as taught by Bayeh above.

Conclusion

28. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US 2002/0138568 A1, note Fig. 7; US 5,899,990, note Fig. 1; US 6,701,368 B1, note Fig. 2; US 6,633,899 B1, note Fig. 1B; US 6,591,266 B1, note Fig. 2; US 6,470,386 B1, note abstract; US 6,442,565 B1, note teaches queuing; US 6,347,341 B1, note teaches queuing of data from I/O devices and delivery to web browser; US 6,247,056 B1, note Fig. 2; US 6,163,794, note col. 15; US 6,021,437, note teaches queued messaging system for dynamic update of client browser; US 5,956,714, note teaches queued messaging system; US

5,925,100, note teaches queuing of related objects for display on a page; US 2003/0093585 A1, note Fig. 3.

29. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aaron C Perez-Daple whose telephone number is (703) 305-4897. The examiner can normally be reached on 9am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Follansbee can be reached on (703) 305-8498. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

7/1/04

Aaron Perez-Daple

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